

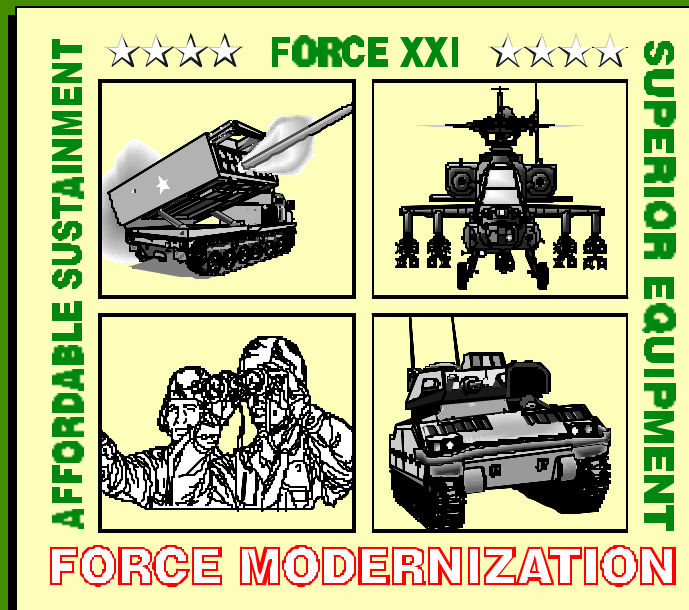
CTR



Assistant Secretary
of the Army
(Research, Development
and Acquisition)
and
U.S. Army Materiel
Command

Continuous Technology Refreshment

*Reducing Sustainment Costs by
Inserting Today's Technologies to
Modernize Operational Systems*



DoD
Maintenance
Symposium
1999

CTR Strategy . . .

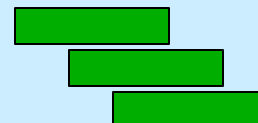
. . . to Address:

TECHNOLOGY OBSOLESCENCE

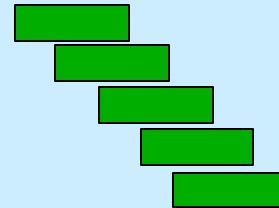
- ➔ Multifunction microcircuits
- ➔ Rapid technology cycle reductions
- ➔ Capability increases:
 - R & M
 - Processing speeds

SYSTEMS REMAIN IN FIELD BEYOND DESIGN LIFE

PRODUCTION



SPARES DELIVERIES



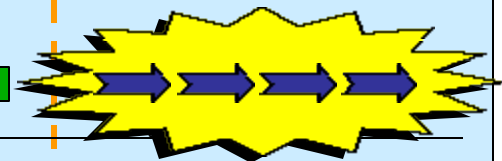
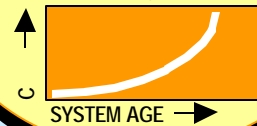
PROCUREMENT \$\$

O & M \$\$\$\$

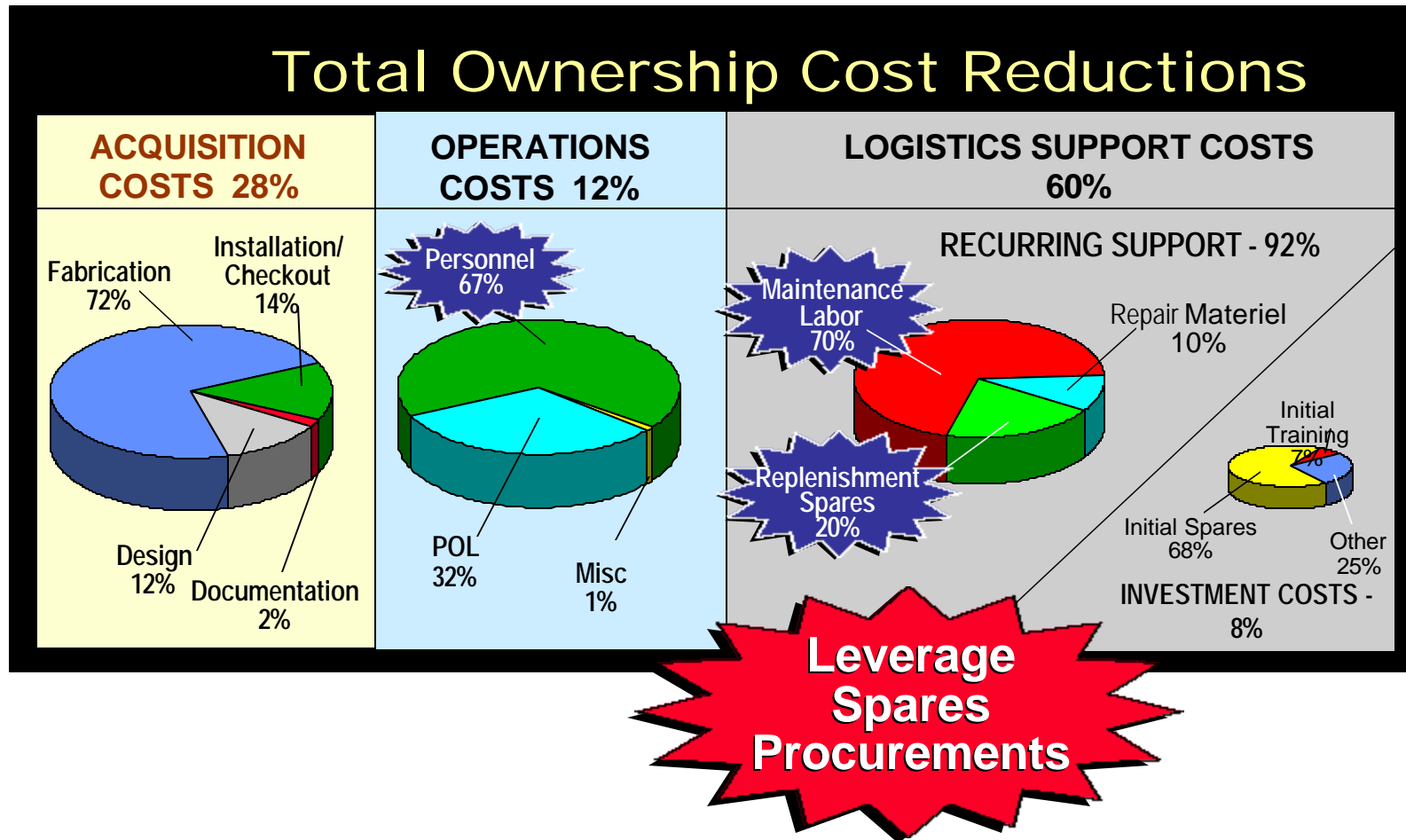
END OF PRODUCTION

Aging Systems mean:

- Obsolete parts
- Decreasing MTBF
- Increasing support costs



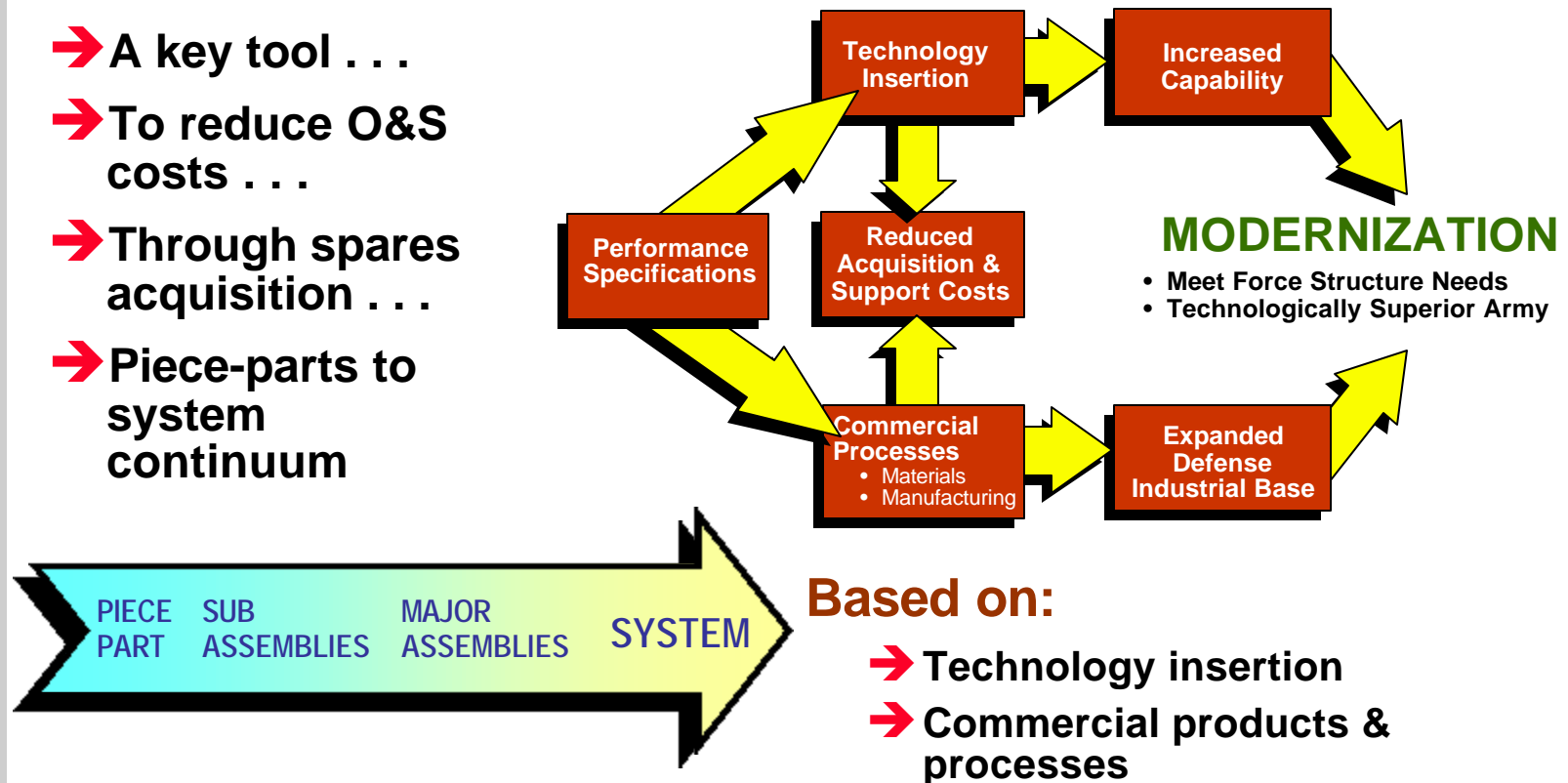
CTR Leverages Portion of O&S Costs



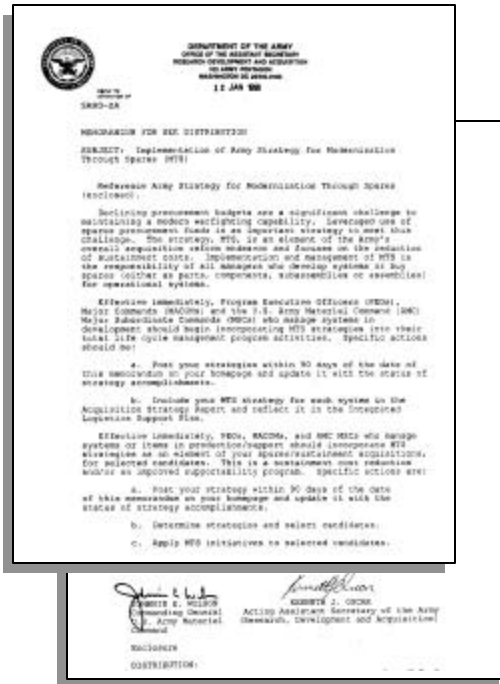
What is CTR: A Definition

Continuous Technology Replacement (CTR) is a spares acquisition strategy applied throughout the materiel acquisition life cycle to reduce sustainment costs.

- ➔ A key tool . . .
- ➔ To reduce O&S costs . . .
- ➔ Through spares acquisition . . .
- ➔ Piece-parts to system continuum

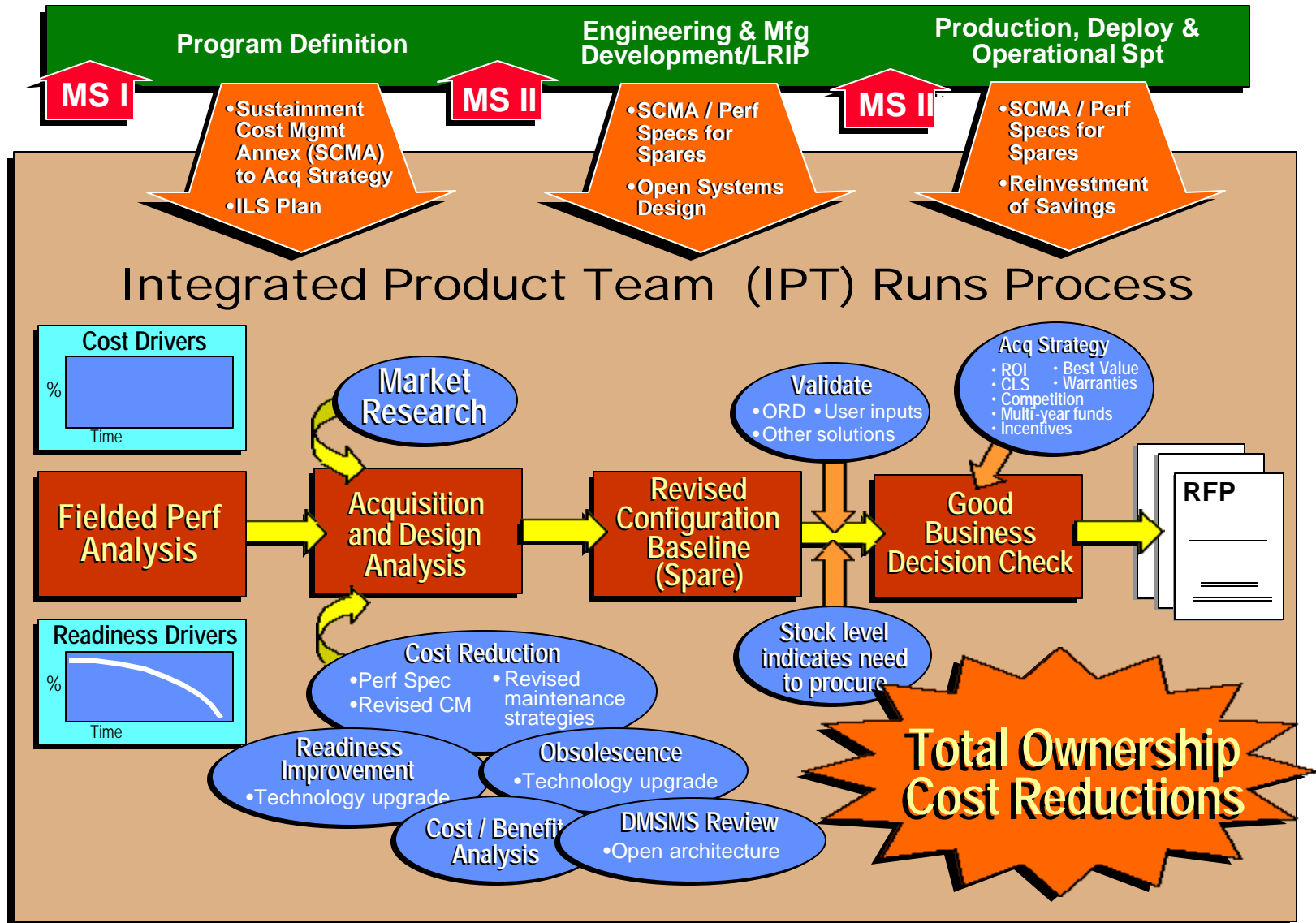


CTR Implementation



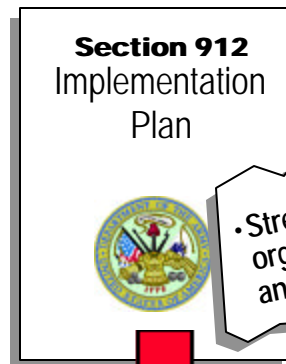
- Tasking Memo of January '98
- Acquisition Managers responsible for implementation
- Consistent with life cycle responsibilities
- Systems in development:
 - ➔ Post strategies on Homepage within 90 days and update with accomplishments
 - ➔ Include CTR in System Acquisition Strategy Report and ILSP
- Spares/sustainment acquisitions:
 - ➔ Post strategies on Homepage within 90 days and update with accomplishments
 - ➔ Select candidates
 - ➔ Apply CTR to selected candidates
- Set goals and report progress:
 - ➔ Metrics reporting initiated

PM's CTR Life Cycle Role



CTR - Evolutionary Strategy Supporting TOCR

- National Defense Authorization Act of 1998
SecDef Report to Congress



• Streamline Acquisition organization, workforce, and infrastructure

PLUS

RELATED EFFORTS

- ✓ Value Engineering
- ✓ OSCR
- ✓ COSSI
- ✓ DUAP
- ✓ HTI

RESTRUCTURE SUSTAINMENT

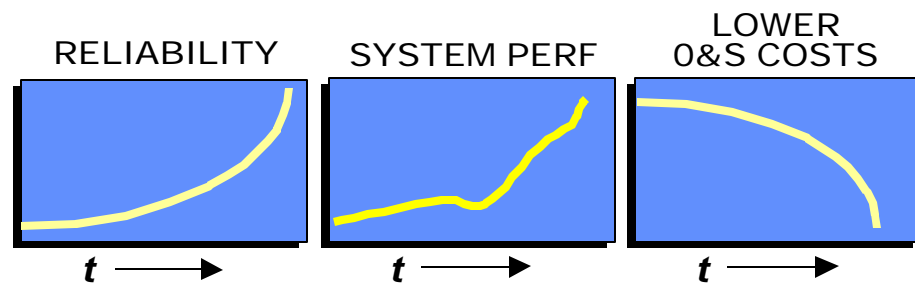
PRIME VENDOR SUPPORT
COMPETITIVE SOURCING
COMMERCIAL PRACTICES
PM LCCM

MODERNIZATION THROUGH SPARES

- Department-wide program
- Technology advances
- Modular components
- Open architecture

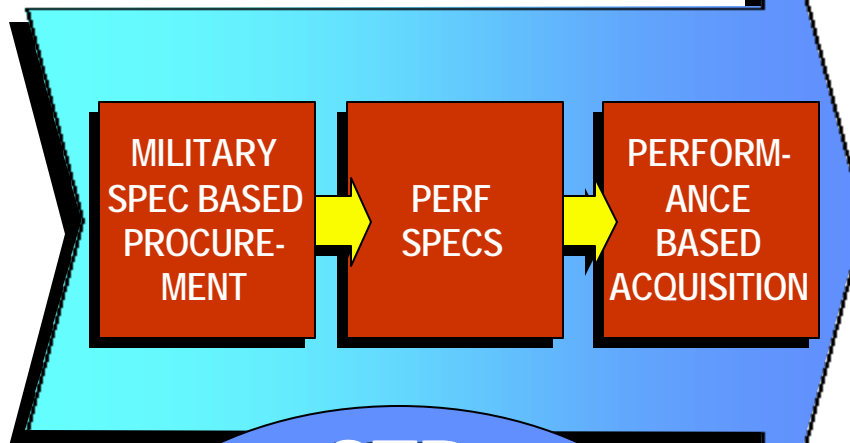
Continuous Technology Refreshment

TOCR CONTRIBUTIONS



CTR Role in Standardization

Defense Standardization Program Evolution:



CTR PAYOFF

- ✓ Design Alternatives
- ✓ Improved Performance
- ✓ Lower O&S Costs

Next Evolutionary Step:

DSP Strategic Plan 2000

- ✓ Interoperability
- ✓ Readiness
- ✓ Total Ownership Costs

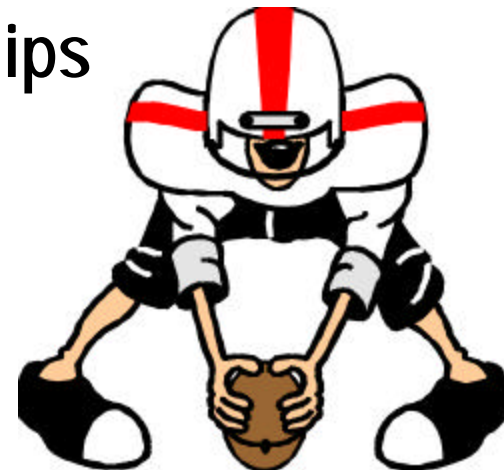
Even Greater CTR Payoff

Supporting the Warfighter Through Standardization

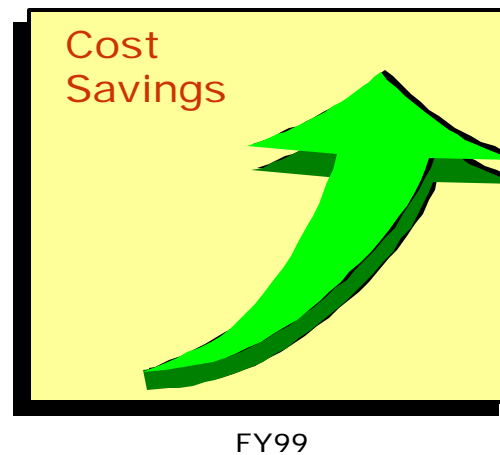
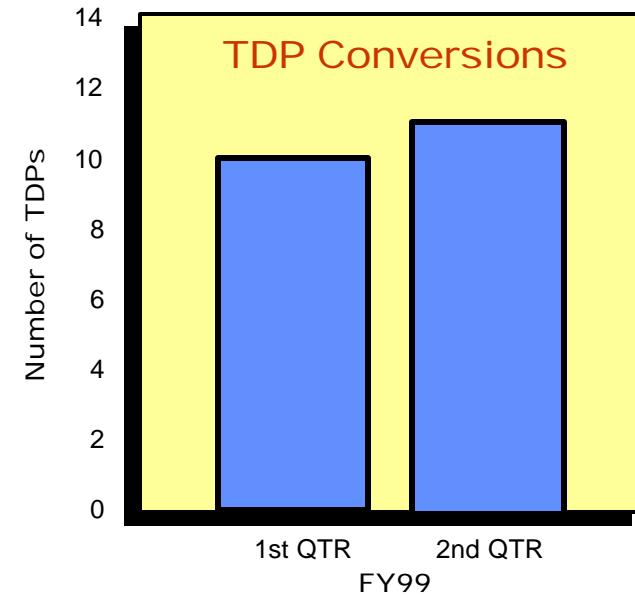
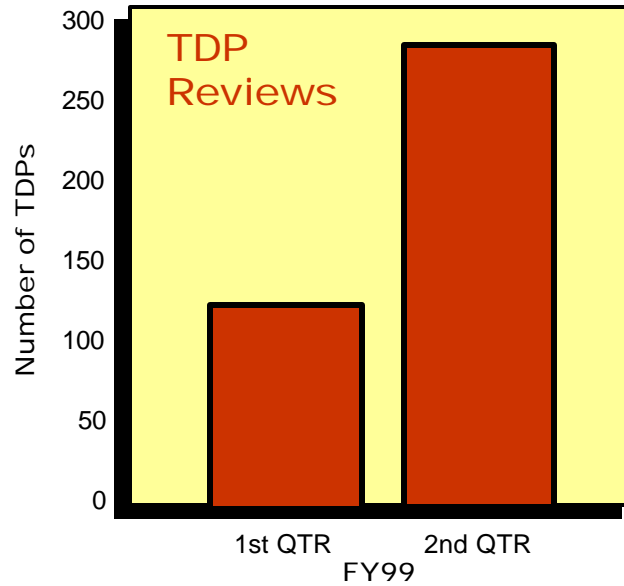


Business Strategy Effects

- ✓ Performance based requirements
- ✓ System CM at major subsystems level
- ✓ Contractor retains CM role
- ✓ Competitive spares procurements based on form, fit, function and interface
- ✓ Long term supplier relationships



CTR Metrics

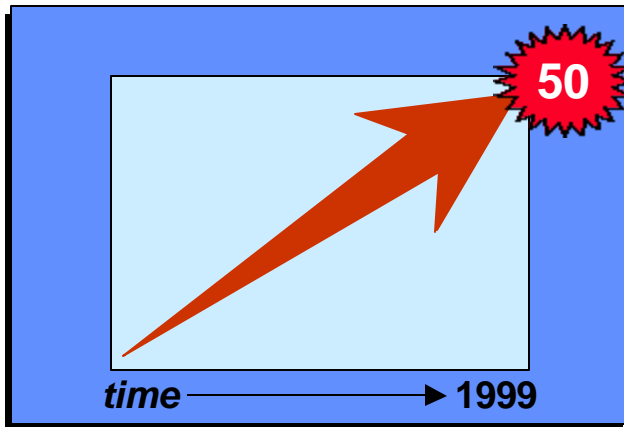


Challenges and Issues

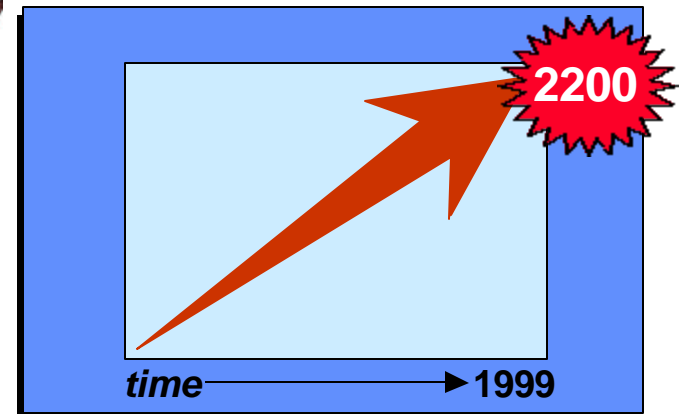
- ✓ Willingness / ability to invest today for savings tomorrow
- ✓ Uncertainty of system service life
 - ➔ replace vs. extend
- ✓ Allocation of savings/cost avoidances
- ✓ Re-examination of funding and maintenance policy
 - ➔ 'right kind' of funding available
 - ➔ coincidental 'improvements' allowed



Training Courses



Army Sites Visited



Acq. Personnel Trained

Course Titles:

- ✓ Performance Specification Conversion
- ✓ Acquisition Documentation Streamlining
- ✓ CTR I
- ✓ CTR II
- ✓ Smart Acquisition of Military Systems (SAMS)

WORKSHOPS

ROADSHOWS

Summary

- **Army has:**
 - ✓ Evolved CTR from concept to strategy
 - ✓ Challenged Program/Item Managers to implement CTR
- **CTR momentum continues**
- **CTR links to other Total Ownership Cost Reduction initiatives**

